

## TRADEMARK ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:	SECURITY INTEREST		
<b>CONVEYING PARTY DATA</b>			
Name	Formerly	Execution Date	Entity Type
Atlantic Hydrogen Inc.		10/11/2012	CORPORATION: CANADA
<b>RECEIVING PARTY DATA</b>			
Name:	Emera, Inc.		
Street Address:	1223 Lower Water Street		
City:	Halifax		
State/Country:	NOVA SCOTIA		
Postal Code:	B3J 3S8		
Entity Type:	CORPORATION: NOVA SCOTIA		
<b>PROPERTY NUMBERS Total: 3</b>			
Property Type	Number	Word Mark	
Serial Number:	85123039	CARBONSAVER	
Serial Number:	85491757	ENERBLACK	
Serial Number:	85491718	SYNBLACK	
<b>CORRESPONDENCE DATA</b>			
Fax Number:	2077747499		
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>			
Phone:	207-774-4000		
Email:	cbacall@verrilldana.com		
Correspondent Name:	Charles P. Bacall		
Address Line 1:	One Portland Square		
Address Line 2:	P.O. Box 586		
Address Line 4:	Portland, MAINE 04112-0586		
ATTORNEY DOCKET NUMBER:	32290-8374		
<b>DOMESTIC REPRESENTATIVE</b>			

900235812

**TRADEMARK**  
 REEL: 004879 FRAME: 0634

OP \$90.00 85123039



Name:

Address Line 1:

Address Line 2:

Address Line 3:

Address Line 4:

NAME OF SUBMITTER:

Charles P. Bacall

Signature:

/Charles P. Bacall/

Date:

10/11/2012

Total Attachments: 7

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## INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement is entered into as of October 11, 2012, by and between EMERA, INC., a Nova Scotia company with an address of 1223 Lower Water Street, Halifax, Nova Scotia, B3J 3S8 ("Secured Party") and ATLANTIC HYDROGEN INC., a federal company with an address of 420 Wilsey Road, Fredericton, New Brunswick, E3B 6E9 ("Grantor").

### RECITALS

A. Secured Party has agreed to make certain advances of money and to extend certain financial accommodations to Grantor in the amounts and manner set forth in that certain Debenture Purchase Agreement by and between Secured Party and Grantor dated of even date herewith (as the same may be amended, modified or supplemented from time to time, the "Debenture Purchase Agreement"). Secured Party is willing to enter into the Debenture Purchase Agreement with Grantor, but only upon the condition, among others, that Grantor shall grant to Secured Party a security interest in certain Copyrights, Trademarks and Patents to secure the obligations in the Debenture Purchase Agreement.

B. Pursuant to the terms of the Debenture Purchase Agreement, Grantor has granted to Secured Party a security interest in all of Grantor's right, title and interest, whether presently existing or hereafter acquired, in, to and under collateral defined in the Debenture Purchase Agreement, including the Copyrights, Trademarks and Patents listed herein.

NOW, THEREFORE, Grantor hereby represents, warrants, covenants and agrees as follows:

### AGREEMENT

To secure its obligations under the Debenture Purchase Agreement and under all other agreements now existing or hereafter arising between Grantor and Secured Party, Grantor grants and pledges to Secured Party a security interest in all of Grantor's right, title and interest in, to and under those Copyrights, Patents and Trademarks listed on Exhibits A, B and C hereto, and including without limitation all proceeds thereof (such as, by way of example but not by way of limitation, license royalties and proceeds of infringement suits), the right to sue for past, present and future infringements, all rights corresponding thereto throughout the world and all re-issues, divisions, continuations, renewals, extensions and continuations-in-part thereof.

This security interest is granted in conjunction with the security interest granted to Secured Party under the Debenture Purchase Agreement. The rights and remedies of Secured Party with respect to the security interest granted hereby are in addition to those set forth in the Debenture Purchase Agreement and those which are now or hereafter available to Secured Party as a matter of law or equity. Each right, power and remedy of Secured Party provided for herein or in the Debenture Purchase Agreement or now or hereafter existing at law or in equity shall be cumulative and concurrent and shall be in addition to every right, power or remedy provided for herein and the exercise by Secured Party of any one or more of the rights, powers or remedies



provided for in this Intellectual Property Security Agreement, the Debenture Purchase Agreement or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including Secured Party, of any or all other rights, powers or remedies.

Grantor represents and warrants that Exhibits A, B, and C attached hereto set forth any and all intellectual property rights in connection to which Grantor has registered or filed an application with either the United States Patent and Trademark Office or the United States Copyright Office, as applicable.

Upon a default by Grantor under the Debenture Purchase Agreement, Grantor hereby irrevocably appoints Secured Party as Grantor's attorney-in-fact, with full authority in the place and stead of Grantor and in the name of Grantor upon Grantor's failure or inability to do so, to take any action and to execute any instrument which Secured Party may deem necessary or advisable to accomplish the purposes of this Intellectual Property Security Agreement including, but not limited to, effecting the transfer of all right, title and interest in and to the Copyrights, Patents and Trademarks to Secured Party and to maintaining in effect all such intellectual property in its sole discretion.

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute the same instrument.



IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

GRANTOR:

Address of Grantor:

ATLANTIC HYDROGEN INC.

By: 

Title: David Wagner, President

SECURED PARTY:

Address of Secured Party:

EMERA, INC.

By: \_\_\_\_\_

Title: \_\_\_\_\_

Signature Page -- Emera/AHI -- Security Agreement (US)



IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

GRANTOR:

Address of Grantor:

ATLANTIC HYDROGEN INC.

By: \_\_\_\_\_

Title: David Wagner, President

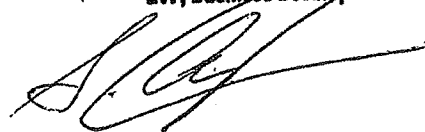
SECURED PARTY:

Address of Secured Party:

EMERA INC.

By:  \_\_\_\_\_

Title: **Nancy Tower**  
**EVP, Business Development**



STEPHEN D. AFTANAS  
CORPORATE SECRETARY



**EXHIBIT A**

**Copyrights**

<b><u>Description</u></b>	<b><u>Registration Number</u></b>	<b><u>Registration Date</u></b>
None.		



**EXHIBIT B****Patents**

<b><u>Description</u></b>	<b><u>Patent/ Application Number</u></b>	<b><u>Issue/ Filing Date</u></b>
Production of Hydrogen and Carbon from Natural Gas Using Barrier Discharge Non-Thermal Plasma	10479761	12/05/2003
Apparatus and Method for Effecting Plasma-Based Reactions	13122358	10/01/2009
Decomposition of Natural Gas or Methane Using Cold Arc Discharge	11795372	07/16/2007
	8221689	07/17/2012
Inhibiting Aggregation During Production of Carbon Black	61/659,952	06/14/2012
Modulating Supply of Carbon Black-Yielding Material to Reaction Zone of Carbon Black Reactor	61/659,954	06/14/2012
Quenching of Carbon Black-Producing Process	61/659,955	06/14/2012
Cooling of Injector Lance used for Supplying Carbon Black-Yielding Material	61/659,956	06/14/2012
Controlling Aggregation During Production of Carbon Black in Pressurized Reaction Zone	61/659,961	06/14/2012
Dual-Stage Plasma Reactor	61/672,842	07/18/2012
Operation of Multiple Plasma Processes	61/672,846	07/18/2012



**EXHIBIT C**

**Trademarks**

<b><u>Description</u></b>	<b>Registration/ Application Number</b>	<b>Registration/ Application Date</b>
CARBONSAVER	85123039	September 3, 2010
ENERBLACK	85491757	December 9, 2011
SYNBLACK	85491718	December 9, 2011

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